

ASSESS  
DESIGN  
INSTALL



# DIY NATIVE LANDSCAPING

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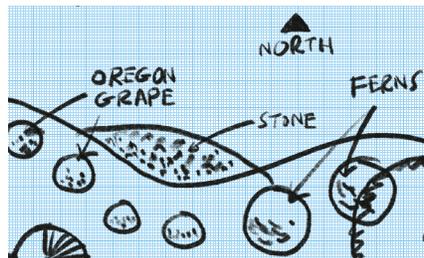
Native landscaping is the removal of less permeable surfaces in your yard— such as patios or lawns - and replacing them with native plants and cultivars that have deeper root systems

and amended soils. Native landscaping benefits the environment by improving water quality, preserving native plant species, and providing wildlife and pollinator habitat.

Use this guide as a resource to help you plan and install native landscaping for your yard. The process includes 3 steps:



**1** ASSESS  
YOUR SITE  
CONDITIONS



**2** DESIGN  
YOUR  
PROJECT



**3** INSTALL  
YOUR  
PROJECT



## STEP 1 - ASSESS YOUR SITE CONDITIONS

Before adding native landscaping to your yard, take a closer look and assess the growing conditions so you can choose the right plants for the right places. Use the form at the end of this section to take notes on your site assessment.

### Think about why you want to use native landscaping. *Is it to:*

- Capture rainwater runoff from your roof?
- Attract wildlife (birds, butterflies, etc.)?
- Block winter winds?
- Create focal points or views that can be enjoyed from your home?
- Shade your home?
- Grow edible plants?

### Are there any restrictions on where you can place native landscaping?

- Will you have access to water for your plants?
- What other space needs do you have in your yard?
- Are there existing tree roots, buildings, or other structures in your project area?
- Are there critical area restrictions, utility easements, or HOA restrictions in your project area?

### Check out your existing vegetation. *As you develop your project plan, be sure to note what's already growing in your yard.*

- Do you already have trees or plants in your project area that are providing an environmental benefit?
- Note any invasive weeds on your site. You'll be most successful if you identify individual weed types and plan to manage accordingly. (Weed ID and proper management practice information - [Kingcounty.gov/weeds](http://Kingcounty.gov/weeds).)

**CALL BEFORE YOU DIG!**

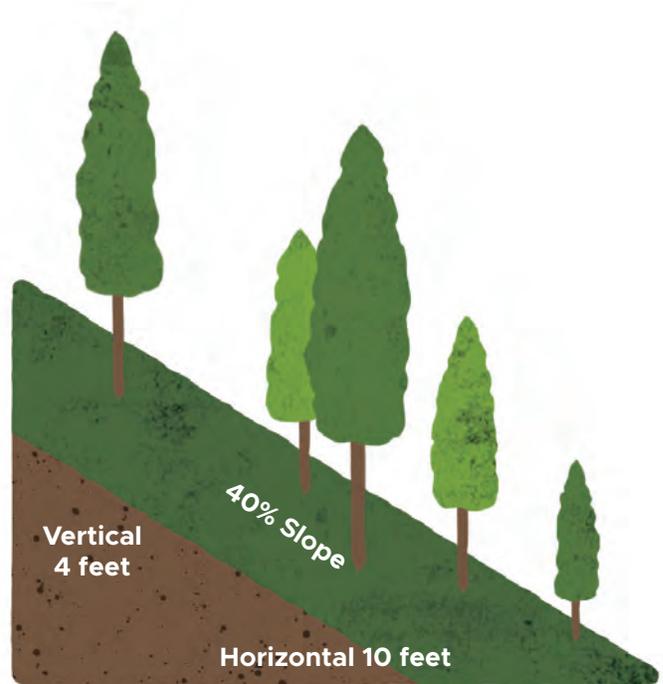
**CALL 811 OR VISIT  
WWW.CALLBEFOREYOUTDIG.ORG  
TO REQUEST A FREE UTILITY LOCATE.  
IT'S FREE AND IT'S THE LAW.**

☐ **Observe how well water drains in your proposed project area.** *This information will help you determine which plants are most likely to thrive in your site's soil moisture conditions.*

- Does the soil tend to be wet or dry?
- Does it drain well or is there standing water after heavy rainfall?

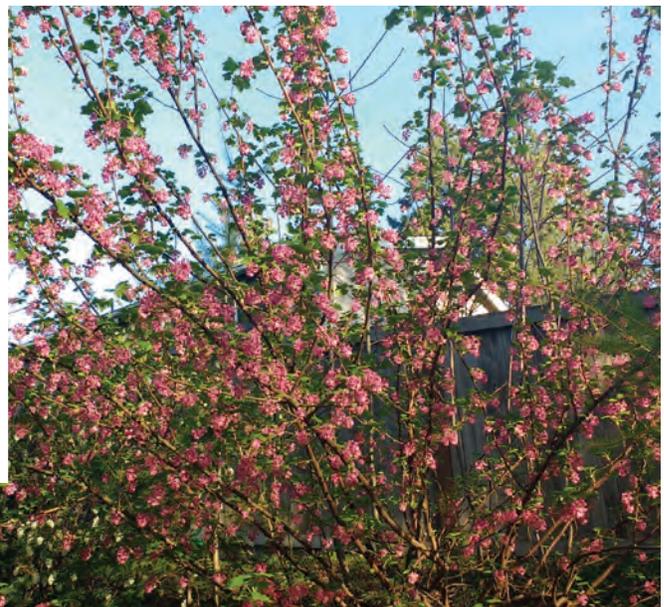
☐ **Note the topography of your project area.** *Slope is an important aspect of site planning. Plants can be used to stabilize slopes, or native groundcover can be used as a low-maintenance alternative to lawn on a slope. Also, steep slopes can often drain water quickly, need drought tolerant plants, and may require erosion control.*

- Is your site relatively flat? Does it have a moderate or steep slope?



**STEEP SLOPES ARE DEFINED AS 15 PERCENT OR STEEPER.**

**IF YOU ARE UNSURE IF YOUR SLOPE IS STABLE, CONSULT THE CITY, A GEOLOGIST, OR GEOTECHNICAL ENGINEER FOR HELP.**



☐ **Observe light conditions in your project area.** *Most plants have specific light requirements – sun dependent, shade dependent, or part sun/part shade.*

- Observe your area at different times of day and determine if it is:
  - ◆ Full sun – direct sunlight most of the day (6 or more hours)
  - ◆ Part sun or part shade – a half day of sun or shade (4-6 hours)
  - ◆ Shady – little or no direct sunlight (less than 2 hours)
- Remember that existing trees, your house, and other structures cast shade.



☐ **Get to know your soils.** *Soil conditions can be greatly impacted by past construction activities. Dig small holes about a foot deep at a few different spots in your project area to learn more about your yard's soils.*

- **Soil texture.** Soil texture refers to the proportion of sand, silt and clay particles that make up your soil. You can find out your soil texture by conducting a “ribbon test.” Moisten a sample of soil enough to make it into a ball. Form a ribbon by squeezing the soil between your thumb and finger.
  - ◆ If the soil forms a ribbon up to 2 inches long, you have clay soil.
  - ◆ If the soil falls apart easily and does not make a ribbon, then you have sandy soil.
  - ◆ If the soil forms a ribbon about 1 inch long, you have loamy soil, which is considered the ideal soil condition.
- **Organic matter.** Note the color of your soil. The darker your soil, the richer it is in organic matter and contains more nutrients for plants. Lighter colored soil may need to be amended with compost before planting.
- **Soil compaction.** How hard is it to dig in your yard? Is the soil soft and fluffy or is it hard and compacted? Compacted soils may need to be tilled and amended with compost before planting.



SOIL TEXTURE RIBBON TEST



**SITE ASSESSMENT NOTES**

**PROJECT GOALS:**

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**SITE RESTRICTIONS:**

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*Check all that apply to your site:*

<b>EXISTING VEGETATION</b>	<input type="checkbox"/> None (bare soil)	<input type="checkbox"/> Weeds	<input type="checkbox"/> Lawn
	<input type="checkbox"/> Native plants	<input type="checkbox"/> Ornamental plants	
<b>DRAINAGE</b>	<input type="checkbox"/> Dry	<input type="checkbox"/> Wet	<input type="checkbox"/> Moderate
<b>TOPOGRAPHY</b>	<input type="checkbox"/> Flat	<input type="checkbox"/> Moderate slope	<input type="checkbox"/> Steep slope
<b>LIGHT</b>	<input type="checkbox"/> Sun	<input type="checkbox"/> Shade	<input type="checkbox"/> Partial sun/shade
<b>SOIL TYPE</b>	<input type="checkbox"/> Clay	<input type="checkbox"/> Loam (mix of sand & clay)	<input type="checkbox"/> Sand
<b>SOIL COLOR</b>	<input type="checkbox"/> Light	<input type="checkbox"/> Dark	
<b>SOIL COMPACTION</b>	<input type="checkbox"/> No compaction	<input type="checkbox"/> Moderate compaction	<input type="checkbox"/> Highly compacted



## STEP 2 - DESIGN YOUR PROJECT

Once you know more about your site conditions and defined your goals, you can design your project. Use the information you gathered to choose plants that will flourish in your site's conditions.

**□ Define your planting area.** *Use a garden hose, rope or other flexible material to help you outline/ visualize your planting area. Measure the area that you wish to convert to native landscaping.*

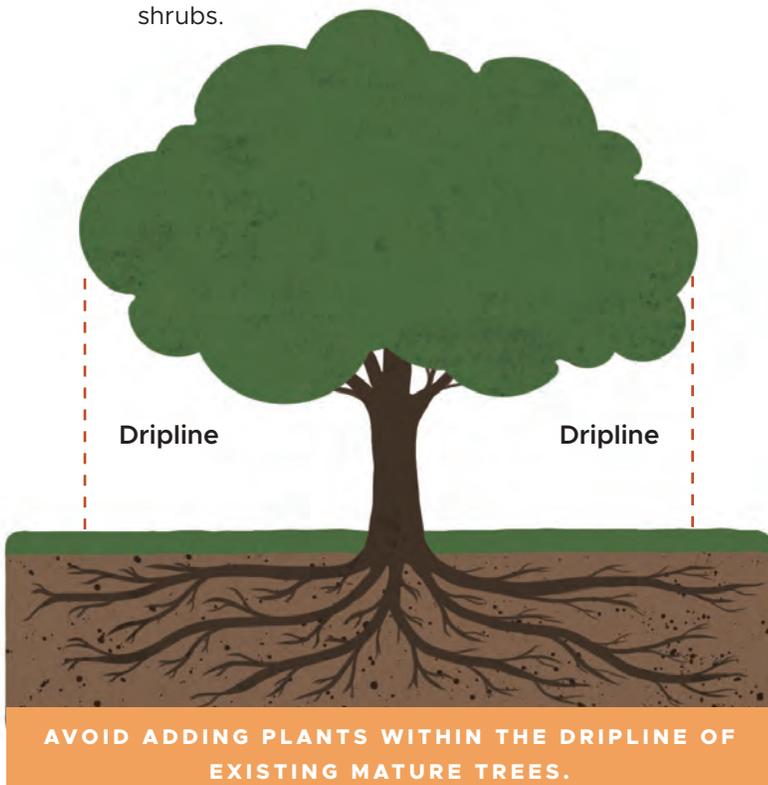
### □ Choose your plants.

- Choose plants that are appropriate for your site conditions (plant needs match sun and water conditions). Find links to plant lists in the Resources section of this guide.
- Consider budget, ease of care, compatibility with neighboring plants, aesthetics.
- Ensure you have appropriate space for the full-grown size of the plants.
- Example planting templates appropriate for a variety of site conditions can help you get started. [green2.kingcounty.gov/gonative/Plan.aspx](https://green2.kingcounty.gov/gonative/Plan.aspx)



□ **Develop your planting plan.**

- **Choose a scale.** On grid paper, one grid square per one foot in your yard should work for most sites. For larger sites, use one grid square for 2-5 feet, depending on the size of the site. Record the scale that you are using on the grid paper.
- **Draw your planting area** on the grid paper. Include permanent structures and existing plants that will remain on site. As needed, measure these to the nearest foot and add to your plan.
- **Add your plants to your plan.**
  - ◆ **Lay out the trees first.** Make sure to give them enough space. Draw tree circles 15 feet in diameter at your plan's scale. Shrubs and groundcovers can be included within and overlap a tree circle but other trees should not.
  - ◆ **Now lay out the shrubs.** Draw shrub circles 6 feet in diameter at your plan's scale. Group them together in clusters according to species. Remember the school photo rule - tall plants in the back, short plants in the front.
  - ◆ **Now add in the groundcover and perennials.** Draw groundcover circles 3 feet in diameter at your plan's scale. Use these to fill in around the trees and shrubs.



**KEEP A FEW THINGS IN MIND AS YOU THINK ABOUT WHERE TO PLACE PLANTS IN YOUR LANDSCAPE:**

› **Size and spacing.**

As you draw your plan, keep in mind that every plant gets larger and changes shape as it gets older. Give each plant enough space to grow without being crowded out by other plants. You may be surprised at how few plants are needed for your project.

› **Guidelines for plant spacing:**

- ✓ Trees – 15 to 20 feet on center
- ✓ Shrubs – 6 to 8 feet on center
- ✓ Groundcover – 3 to 4 feet on center

› **Plant arrangement.**

Consider the mature height of plants – keep taller plants in the back, shorter plants in the front of planting bed.

› **Consider aesthetics.**

Clump same species and same color together in clusters of 3 to 5 plants. This helps create a more natural look for your landscape.

› **Consider existing structures.**

Consider the mature width of plants. Do not place too close to walkways, driveways, house or other structures. This will save you the effort of extra pruning in the future.

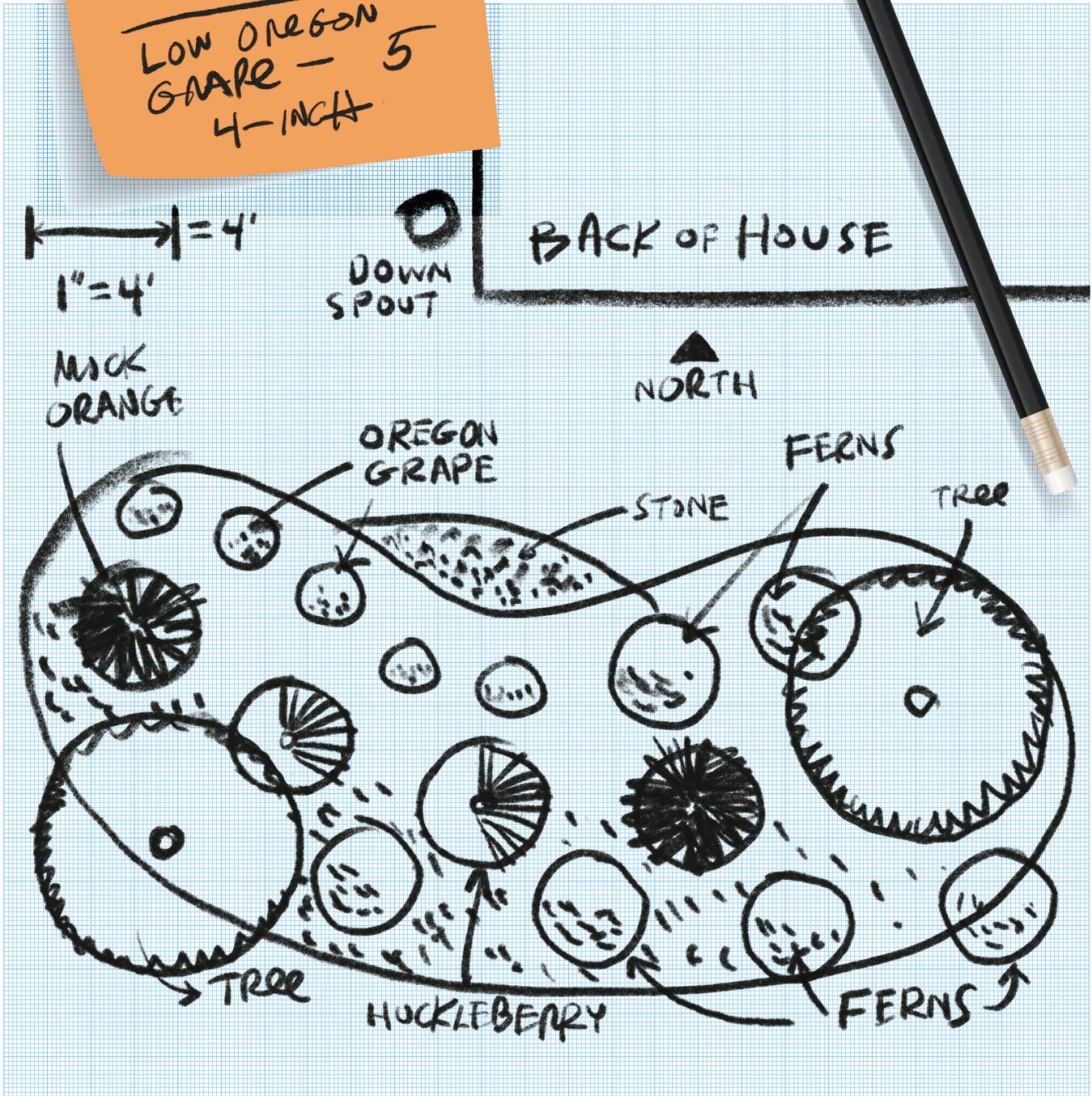


SWORD FERN - 6  
MOCK ORANGE - 2  
EVEN. HUCKLEBERRY - 2  
1 GAL. EACH

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LOW OREGON  
GRAPE - 5  
4-INCH

Make a plant list.  
List species, size,  
number of plants  
that you used in  
your planting plan.



**☐ Plan to improve your soil.**

*Mulch and compost increase your soil's capacity to hold and filter water while building healthy soil that will help your plants thrive.*

- **Mulch.** Mulch is any material placed around plants to prevent weeds and conserve water. Coarse wood chip mulch is the best. It can usually be purchased from any topsoil and compost supplier or procured for free from arborists. “Beauty bark” or other shredded bark products make a poor mulch substitute. Shredded bark does not retain moisture as well and will NOT prevent weed seeds from germinating around your newly installed plants.
- **Compost (if needed).** Adding compost will greatly improve your soil in areas that are highly compacted, and where soils are low in organic matter.
  - ◆ Do you have compacted or poor soils? Plan to till highly compacted soils prior to planting.
    - ✓ Use a shovel or rototiller to loosen soils in your planting area. Rototillers can be rented from home improvement or equipment rental stores.
    - ✓ Dig or till in 2- 3 inches of compost into the loosened soil.



**HOW MUCH MULCH DO I NEED?**

- Plan to lay a 3-inch or thicker layer of mulch in your planting area.
- Mulch is measured by the cubic yard. To figure out how many cubic yards you need, follow the formula below:

*Project area (sq ft) X Planned mulch depth (inches) ÷ 324 = # of cubic yards of mulch*



**HOW MUCH COMPOST DO I NEED?**

- Compost is sold by the cubic yard. To figure out how many cubic yards you need, follow the formula below:

*Project area (sq ft) X Planned compost depth (inches) ÷ 324 = # of cubic yards of compost*

**FREE SOURCES OF MULCH:**

- LEAVES AND BRANCHES FROM YOUR YARD
  - WOOD CHIPS FROM LOCAL TREE SERVICES.
- CONTACT LOCAL ARBORISTS OR VISIT  
[HTTPS://GETCHIPDROP.COM/](https://getchipdrop.com/)



**STEP 3 - INSTALL YOUR PROJECT**

Plan to install your native landscaping project between late fall and early spring. Trees and woody shrubs are ideally planted in the fall to support root establishment before the growing season. Avoid planting in the summer or when the ground is frozen.

**Site preparation**

Clear planting area

• Turf removal

- ◆ Use a shovel to dig out grass. Make sure you remove the roots of the existing grass and weeds so they do not grow back.
- ◆ Use a sod cutter (manual or powered) to slice off thin horizontal layers of sod. Sod cutters can be rented from equipment rental companies or home improvement stores.
- ◆ Turf can also be removed through sheet mulching - see next page for details.



- **Weed removal**
  - ◆ Use weeding tools to remove plants by hand - dig out plants and roots entirely (including seeds, fruits and leaves).
  - ◆ The best time to remove weeds is prior to flowering. If removal occurs after flowering, cut off and dispose of flowers before digging out roots. Dug-out materials should be disposed of in yard waste and, in the case of some noxious weeds, the trash. Do not use weed materials for mulch.
  - ◆ If the soil is dry, water well to moisten soil and make digging easier.
- **Sheet mulching** – This is an easier but slower way to prepare an area for planting. You are not removing grass or weeds with this method. You pile layers of cardboard with mulch to kill the plants beneath. It is appropriate for flat areas without much foot traffic. You can sheet mulch at any time, but the best time to sheet-mulch is the spring – the weeds and grass should be dead by fall and ready for planting.



#### SHEET MULCHING STEPS

##### › Gather your materials.

At a minimum, you'll need enough cardboard (tape and staples removed) to cover your project area with room to overlap pieces and enough woody mulch to cover the cardboard in at least a 2-inch deep layer. You can also add a layer of compost on top of the cardboard and then cover the compost with mulch.

##### › Prepare your site.

Mow grass or other vegetation to the lowest level possible. Knock down or remove weeds. Flag any sprinkler heads. Soak the area to jumpstart the decomposition process.

##### › Lay down your cardboard.

Lay cardboard over project area from one end of the space to the other. Be sure to overlap cardboard pieces by at least 6 inches. Once the cardboard is in place, wet it down until it becomes heavy and limp so it takes the shape of the ground below and doesn't shift around. Work around existing plants by ripping and folding the cardboard – much easier to do when it's wet.

##### › Add organic materials.

Just adding mulch? Spread a layer at least 2 inches thick on top of cardboard. If you're also using compost, spread it in a 2-inch layer and then cover the compost with your mulch.

##### › Wait before planting.

Wait 3 months or longer before planting. For each planting hole, pull aside the woodchips before digging each plant in. Then, rake wood chips back around each plant.

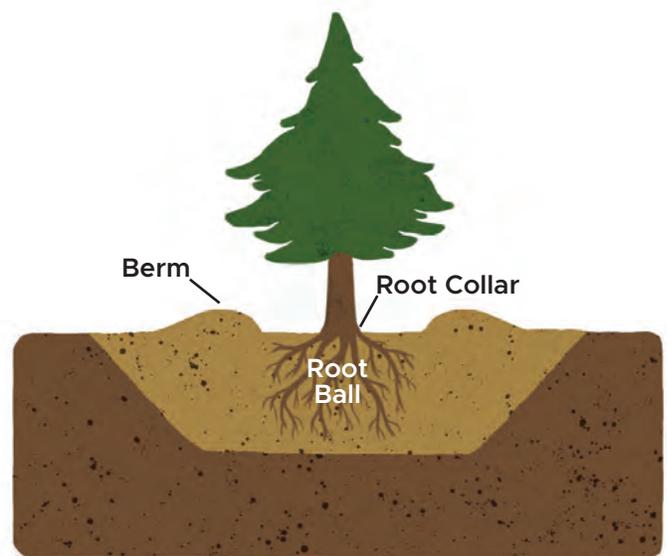
### De-compact and amend soils

- Use a shovel or rototiller to break up compacted soils.
- While breaking up soils, be sure to avoid damaging the roots of existing native plants. Most plant roots are in the top 12” of the soil, so it’s best to work around them. Stay out of the dripline of trees and shrubs as much as possible.
- Compost can be worked into the topsoil by hand or rototiller.



### Installing plants

- Lay out plants or use flags to mark the location of each plant.
- Dig a hole for each plant twice the width and as deep as the container soil, but not any deeper than the root ball or plant container height.
- Remove plant from container and massage the root ball to spread roots loosely. Prune or straighten circling roots - roots that circle the bottom and sides of the root ball can later girdle the tree as the trunk attempts to grow outward.
- Place the plant in the hole and ensure that the root collar (widened base of stem just above where roots start) is level with the ground.
- Backfill around the root ball with original soil, breaking up any large chunks and gently pushing down soil as you go, to prevent air pockets.
- Use remaining soil to form a berm (a low ring of dirt) outside the root ball perimeter to hold water around the plant.
- Water immediately to settle soil.
- Once everything is planted, add mulch to your planting area. Avoid placing mulch directly onto plant stems – pull mulch away from the stems to create a ring around the base of plants.



## SOILS

**Growing Healthy Soil** <https://snohomishcountywa.gov/DocumentCenter/View/7257/Growing-Healthy-Soil?bidId=>. A guide for getting to know your soil and how to improve its health.

## SHEET MULCHING

**How to Sheet Mulch** <http://lawntogarden.org/how-to-sheet-mulch>. Collection of resources for sheet mulching, including a step-by-step guide.

**Sheet Mulching: How to Smother Weeds, Build Soil & Conserve Water the Easy Way** <https://modernfarmer.com/2016/05/sheet-mulching/>. Article on the basic steps of sheet mulching.

## PLANT GUIDES

**Great Plant Picks** [www.greatplantpicks.org](http://www.greatplantpicks.org). Plant lists for a variety of site conditions. Includes list of recommended Northwest native plants.

**Native Plant Guide (King County)** [www.kingcounty.gov/gonative](http://www.kingcounty.gov/gonative). Browse or search a database of native plants, find native plants appropriate for your site conditions, check out example native landscaping plans for various site conditions.

**Rain Garden Handbook for Western Washington. Appendix A - Selected Plants for Rain Gardens in Western Washington.** <https://fortress.wa.gov/ecy/publications/documents/1310027.pdf#page=70>. List of native and non-native plants appropriate for rain gardens – also appropriate for native landscaping in a variety of growing conditions.

**Plant Lists by Habitat (WNPS)** <https://wnps.org/native-gardening/resources#habitat>. Lists of native plants appropriate for a variety of habitat conditions.

**King County Noxious Weeds** [www.kingcounty.gov/weeds](http://www.kingcounty.gov/weeds). Weed identification photo index, information on weeds and weed management, and educational opportunities.

## NATIVE PLANT NURSERY LISTS

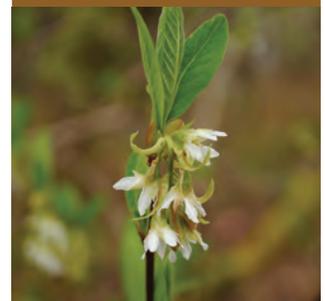
**Native Plant and Seed Source List (Washington Native Plant Society)** [https://www.wnps.org/content/documents/plants/gardening/native-plant-seed-sources\\_5-14-2019.pdf](https://www.wnps.org/content/documents/plants/gardening/native-plant-seed-sources_5-14-2019.pdf)

**Native Plant Nursery List (King Conservation District)** [http://kingcd.org/wp-content/uploads/2018/05/Native\\_Plant\\_Nurseries\\_Sheet\\_2018.pdf](http://kingcd.org/wp-content/uploads/2018/05/Native_Plant_Nurseries_Sheet_2018.pdf)

## PROJECT PLANNING & INSTALLATION

**City of Bellevue Critical Areas Handbook – Restoring, Enhancing, and Preserving** [https://development.bellevuewa.gov/UserFiles/Servers/Server\\_4779004/File/pdf/Development%20Services/ca\\_handbook.pdf](https://development.bellevuewa.gov/UserFiles/Servers/Server_4779004/File/pdf/Development%20Services/ca_handbook.pdf).

Step-by-step guide to aid in development, installation, monitoring and maintenance of small-scale environmental enhancement and restoration projects.





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**Kirkland Public Works - Surface Water Division**  
[www.kirklandwa.gov/stormwater](http://www.kirklandwa.gov/stormwater)